

IN THE CLAIMS

Please delete claims 1-23, and add claims 24-41 as follows:

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24. A lighting system for graphics processing, comprising:
- (a) at least one input buffer adapted for being coupled to a transform system for receiving vertex data therefrom;
  - (b) a multiplication logic unit coupled to the at least one input buffer;
  - (c) an arithmetic logic unit coupled to the at least one input buffer and the multiplication logic unit;
  - (d) a register unit coupled to the arithmetic logic unit; and
  - (e) a lighting logic unit coupled to the arithmetic logic unit, the at least one input buffer, and the multiplication logic unit.
25. The system as recited in claim 24, wherein the multiplication logic unit has a feedback loop coupled to an input thereof.
26. The system as recited in claim 24, wherein the lighting logic unit is coupled to the multiplication logic unit via a conversion module adapted for converting scalar vertex data to vector vertex data.
27. The system as recited in claim 24, wherein the arithmetic logic unit and the multiplication logic unit include multiplexers.
28. The system as recited in claim 24, wherein the multiplication logic unit includes three multipliers coupled in parallel.
29. The system as recited in claim 24, wherein the arithmetic logic unit includes three adders coupled in series and parallel.
30. A lighting system for graphics processing, comprising:
- (a) at least one input buffer adapted for being coupled to a transform system for receiving vertex data therefrom;
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- (b) a multiplication logic unit coupled to the at least one input buffer;
- (c) an arithmetic logic unit coupled to the at least one input buffer and the multiplication logic unit;
- (d) a lighting logic unit coupled to the arithmetic logic unit, the at least one input buffer, and the multiplication logic unit; and
- (e) memory coupled to the multiplication logic unit and the arithmetic logic unit.

31. The system as recited in claim 30, wherein the memory includes a plurality of constants for processing the vertex data.

32. The system as recited in claim 30, wherein the memory has a read terminal coupled to the multiplication logic unit.

33. The system as recited in claim 30, wherein the memory has a write terminal coupled to the arithmetic logic unit.

34. A lighting system for graphics processing, comprising:

- (a) a multiplication logic unit;
- (b) an arithmetic logic unit coupled to the multiplication logic unit;
- (c) a register unit coupled to the arithmetic logic unit;
- (d) a lighting logic unit coupled to the arithmetic logic unit and the multiplication logic unit; and
- (e) memory coupled to the multiplication logic unit and the arithmetic logic unit.

35. A lighting system for graphics processing, comprising:

- (a) at least one input buffer adapted for being coupled to a transform system for receiving vertex data therefrom; and
- (b) a lighting logic unit adapted for receiving the vertex data;
- (c) wherein the lighting logic unit is capable of setting a flag upon the vertex data satisfying predetermined criteria.

36. A method for flagging in a graphics processing module, comprising:

- (a) processing vertex data in a graphics processing module;

- (b) outputting the processed vertex data; and
- (c) setting at least one flag upon the vertex data satisfying predetermined criteria.
37. The method as recited in claim 36, wherein the graphics processing module is a lighting module.
38. The method as recited in claim 37, wherein a lighting logic unit of the lighting module sets the flag.
39. The method as recited in claim 36, and further comprising clamping a value of an attribute of the vertex data based on the setting of the flag.
40. A computer program product for flagging in a graphics processing module, comprising:
- (a) computer code for processing vertex data in a graphics processing module;
  - (b) computer code for outputting the processed vertex data; and
  - (c) computer code for setting a flag upon the vertex data satisfying predetermined criteria.
41. A graphics processing system, comprising:
- (a) logic for processing vertex data in a graphics processing module;
  - (b) logic for outputting the processed vertex data; and
  - (c) logic for setting a flag upon the vertex data satisfying predetermined criteria.
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